ABSTRACT

Methods and apparatus for eliminating C recursion from interpreter loops are disclosed. According to one aspect of the present invention, a computer-implemented method for substantially eliminating C recursion from the execution of static initializer methods in a virtual machine environment includes rewriting native C code associated with a static initializer as a Java™ method, and using a transition frame in a Java™ stack to execute the Java™ method. The method also includes using a native method to manipulate the Java™ stack, and using a first opcode in the transition frame. In one embodiment, using the first opcode in the transition frame includes using the first opcode to determine that the transition frame is associated with the static initializer. In another embodiment, the method further includes causing the static initializer to run, wherein the static initializer using a second opcode, and resuming execution at the second opcode after the static initializer has run.